1091 Union R.R.

Lima Locomotive Works
Incorporated

LIMA, OHIO, U. S. A.

Locomotive Tender
Union Railroad.
CARD INDEX

Class 8-Wheel 7000 Gallon

Dept. Drawing Room

ORDER No.	SHOP NUMBERS	DATE	DRAUGHTSMAN
1091	7124-7133	5-22-1926	
		19	
		19	
		19	
		19	

FORM LED 32

1091 U.R.R

1091

ADDITIONS AND CHANGES

ADDITIONS TO BE MADE IN BLACK INK AND CHANGES IN RED INK

Index to Classification of Drawings

11 Axles
15 Bolts and Nuts—Studs, Pins and Bushings
17 Boxes, Truck—and Details.
Chafing Plate—See 86.
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Coupler—See 86.
35 Die Work—Flanging Dies.
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Fire Extinguisher—See 64.
49 Gauges, Templates and Jigs.
53 Handrail and Steps—Handles.
54 Headlights and Signal Attachments, Lamps, Electric Wiring, Builders' License and Number Plates.
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57 Lagging and Jacket.
Lamps—See 54.
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63 Pipe Fittings and Clamps—Air, Steam, Water and Lubricator Pipe Fittings.
64 Piping Arrangements.
66 Plugs, Handholes and Washout.
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73 Sand Box, Sanders and Rigging.
Signal Attachments—See 54.
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76 Springs.
80 Stoker and Details.
Steam Heat—See 64.
Steps—See 53.
82 Tank Valves—Oil and Water, Handles, Well, Goose Neck, Strainer, Hose and Cooler Cocks.
84 Tender Brake—Truck and Frame Brake.
85 Tender Frames—Front and Back Bumpers.
86 Tender Drawgear—Buffer, Chafing Plate, Coupler and Rigging, Drawhead F. and B.
87 Tender Deck, Tool Box, Water Cooler.
88 Tender Tank—Water and Oil, Coal Gate, Coal Pusher, Filling Hole and Tank Funnel.
89 Tender Truck, Bolster and Guides, Spring Seats and Plank.
90 Tender Water Scoop—Arrangements and Details.
Tires—See 95.
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97 Preliminary Designs and Propositions.
98 Clearances and Wheel Base Diagrams.
99 Miscellaneous.

Date	ITEMS	Check	Date	ITEMS	Check
5-27-26	2-32	S			
5-29-26	10-47,48,49,50,51,52,55,60,61	S			
"	11-2,4	S			
6-10-26	10-14	S			
6-10-26	3-44,45	S			
6-10-26	3-22,23.24.25.26	S			
6-10-26	9-29.30 13.16	S			
6-10-26	10-1.2.3.7.8.11.12.15.20.22.23.24.28.29 33.35.36.37.38.39	S			
6-11-26	8-51	"			
6-11-26	10-22	"			
6-29-26	11-47	S			
7-1-26	8-54,55,	S			
7-12-26	13-1.7.9.16.22	S			
7-12-26	9-35.36.37.39 41.42.51	S			
7-13-26	8-52	S			
7-14-26	10-40	S			
7-16-26	11-39	S			

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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 11—AXLES								
1	1	Axle M01318 A	4	D-45080	Ord	—	—	—	—	—
	2	"								
	3	" Marking								
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13	**GROUP 15—BOLTS AND NUTS**								
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21									
	22									
	23									
	24									
	25	**GROUP 17—BOXES, TRUCK**								
1	26	Box & Lid	8	Kensington With Pressed Steel Lids			—	—	—	—
	27	" Lid	—							
	28	" " Pin	—							
	29	" " Spring	—							
1	30	" Journal Brass	8	Damascus Bronze Ord			—	—	—	—
8	31	" " Wedge 5½"×10	8	A.R.A Drop Forged Ord			—	—	—	—
8	32	" Dust Guard 5½"×10"	8	~~Virginia~~ Thornburg 4 T-L-1-A Ord			—	—	—	—
	33									
	34									
	35									
	36									
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44									
	45	**GROUP 35—DIE WORK**								
	46									
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 49—GAUGES, TEMPLATES & JIGS								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
	12									
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 53—HANDRAIL AND STEPS**								
D	22	Handrail Chain Coupling	2	864 B A6	—	53 A 31	—	—	—	—
D	23	" " Eye bolt	2	" "	—	53 A 32	—	—	—	—
D	24	" Column	4	" "	—	53 B 30	—	—	—	—
D	25	" Chain Eye bolt	4	" "	—	53 B 32	—	—	—	—
D	26	" Chains	1 Set	" "	Chain Ord	—	—	—	—	—
D	27	" ~~Bull~~ " Hook	1	532 A 252	—	532 A 252	—	—	—	—
	28	" Flange								
	29	" "								
	30									
	31	Bumper Handle								
	32	" "								
D	33	Tank " Front R L	1/1	532 E 208	—	532 E 208	—	—	—	—
D	34	" " Rear R L	1/1	532 F 208	—	532 F 208	—	—	—	—
	35	" "								
	36	" "								
	37									
	38									
	39									
	40									
	41									
	42									
D	43	Steps—Front	2	532 A 254	—	—	53-450	—	—	—
D	44	Front Step Hanger R L	1/1	858 B 20	—	53 A 174	—	—	—	—
D	45	" " Brace Front End Sill R L	1/1	"	—	3/4" x 4" x 6" Angle	—	—	—	—
D	46	Steps—Back R L	1/1	532 A 260	Plate	—	—	—	—	—
	47	Back Step Hanger	—							
	48	" " Brace	—							
D	49	Tank Step	1	532 A 254	—	532 A 254	—	—	—	—
	50	" "								
D	51	Tank Ladder—Outside	1	532 A 255	R.S. only	532 A 255	—	—	—	—
	52	" " —Inside	—							
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 54—HEADLIGHTS AND SIGNAL ATTACHMENTS								
	1	Signal Fixtures—Location	—							
	2	Flag Socket	—							
	3	Marker Bracket	—							
D	4	Lamp Bracket	2	542 A15	—	—	54-72	—	—	—
D	5	" ~~Hook~~ Liner	2	"	3/16" Plate	—	—	—	—	—
	6	Pail Hook	—							
D	7	Headlight Bracket	2	888 A22	—	54 C 8	—	—	—	—
D	8	" Shelf	1	"	1/4" Plate	—	—	—	—	—
	9									
	10	License Plate	—							
	11	Ownership Plate								
	12	Patent "	—							
	13									
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 57—LAGGING AND JACKET**								
	22	Steam Pipe Lagging								
	23	" " "								
	24	" " Jacket								
	25									
	26									
	27									
	28									
	29									
	30									
	31									
	32									
	33	**GROUP 59—OIL AND GREASE CUPS**								
	34	Truck Oil Cup								
	35	" " " Cap								
	36									
	37	Stoker Oil Cup								
	38	" " " Cap								
	39									
	40									
	41									
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49	**GROUP 61—PA'TING, LET'RING & NUM'G**								
	50	Tender Lettering								
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 62—PILOT AND SNOW PLOW								
	1	Pilot	—							
	2	" Band	—							
	3	" Brace	—							
	4	" "	—							
	5	" Bottom Plate	—							
	6	" Bracket	—							
	7	" Corner Iron	—							
	8	" Knee	—							
	9									
	10									
	11									
	12									
	13	Snow Plow	—							
	14									
	15									
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 63—PIPE FITTINGS AND CLAMPS**								
	22	Box Cooler Hose	—							
	23	" " Fitting	—							
	24	" " " Nut	—							
	25	" " " Swivel	—							
	26									
	27									
D	28	Pipe Clamp "U" Bolt	1	648 A14	—	63 A 98	—	—	—	—
D	29	" "	1	"	—	63 B 63	—	—	—	—
D	30	" "	3	"	—	560S-301				
	31	" "	—							
D	32	" Hanger	3	"	—	63 B 7	—	—	—	—
D	33	" "	1	"	2"x2"x ¼" Angle 7" Long		—	—	—	—
D	34	" "	1	"	—	63 A 106	—	—	—	—
	35	" "								
	36	" Manifold Air Brake								
	37	" "								
	38	" " Support								
	39	" " "								
	40									
	41	Water Joint Support								
	42									
	43									
	44									
	45									
	46									
	47									
	48									
	49									
	50	**GROUP 64—PIPING ARRANGEMENTS**								
P	51	Piping Arrangement Air Brake		648 A 14	—	—	—	—	—	—
	52									
	53	Sprinkler Piping								
	54									
	55	Steam Heat Piping								
	56									
	57	Coal Pusher Piping								
	58									
	59									
	60									
	61									

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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 66—PLUGS, HANDHOLES AND WASHOUTS								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9	**GROUP 71—RUN'G BOARDS & BRACK'TS**								
	10	Running Board	—							
	11	" "	—							
	12	" " Bracket	—							
	13	" " "	—							
	14	" " "	—							
	15	" " "	—							
	16									
	17									
	18									
	19									
	20									
	21	**GROUP 73—SAND BOX AND RIGGING**								
	22	Sand Box	—							
	23	" " Brace	—							
	24	" " Handle	—							
	25									
	26									
	27									
	28									
	29	**GROUP 76—SPRINGS**								
8	30	Truck Spring	4	762 D6	ord	—	—	—	—	—
	31	" "	—							
	32	" " Clip	—							
	33	" " End Block	—							
	34	Buffer Spring	—							
	35	Coupler Spring	—							
	36	Draw Spring	—							
	37	" "	—							
	38	Water Scoop Spring	—							
	39	" " "	—							
	40	Brake Beam Leveling Spring	—							
	41									
	42									
	43									
	44									
	45									
	46	**GROUP 80—STOKER AND DETAILS**	—							
	47									
	48									
	49									
	50									
	51									
	52									
	53									
	54									
	55									
	56									
	57									
	58									
	59									
	60									
	61									

(Group 80 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 80—STOKER AND DETAILS (Cont.)								
	1									
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									
	10									
	11									
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	36									
	37									
	38									
	39									
	40									
	41									
	42									
	43									
	44	**GROUP 82—TANK VALVES AND COCKS**								
P	45	Tank Valve	2	823 C 1	—	—	—	—	82-203	—
	46	" " Body	—							
D	47	" " Seat	2	823 C 1					82-204	—
D	48	" " ~~Shaft~~ Stuffing Box	2	822 A 11	—	—	—	—	82-208	—
D	49	" " " " Gland	2	"	—	—	—	—	82-209	—
D	50	" " Rod	2	822 E 10	—	82 D 2	—	—	—	—
D	51	" " ~~Lift~~ Clamp	2	"	—	—	82-200	—	—	—
D	52	" " Handle	2	"	—	—	82-198	—	—	—
D	53	" " ~~Gland~~ Flange	2	"	—	—	82-199	—	—	—
D	54	" " Goose Neck	2	822 C 5	—	—	—	—	82-197	—
	55	" " Nut	—							
	56	" " Sleeve	—							
D	57	" " Hose Nut	2	822 A 31	—	—	—	—	82-114	—
	58	" " " Swivel	—							
	59	Tank Valve Flange	—							
	60	" " "	—							
D	61	" " Strainer	2	823 C 1	—	—	—	—	82-201	—

(Group 82 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 82—TANK VAL. AND COCKS (Cont.)								
1	1	Tank Well	2	823 C 1	—	—	82-205	—	—	—
	2	" " Plug	—							
	3	" Syphon	—							
	4	" " Pipe Support	—							
	5	" " Brace	—							
	6									
	7									
	8									
	9	Oil Tank Plug	—							
	10	" " Valve	—							
	11	" " " Seat	—							
	12	" " " Rod	—							
	13	" " " Arm	—							
	14	" " " Gland	—							
	15	" " "	—							
	16	" " " Nut	—							
	17	" " " Sleeve	—							
	18	" " " Drain	—							
	19	" " " " Seat	—							
	20	" " " Stuffing Box	—							
	21	" " " " " Nut	—							
	22	" " " " " Gland	—							
	23	" " " Rod End	—							
	24	" " Measuring Rod	—							
	25	Oil Tank Cock	—							
	26	" " " Cap	—							
	27	" " " Plug	—							
	28	" " " Nut	—							
	29	" " " Washer	—							
	30	" " " Handle	—							
	31	Tank Cock Body	1	822 C 65	—	—	—	—	82-165	—
	32	" " Plug	1	"	—	—	—	—	82-166	—
	33	" " Nut	2	"	7/8" Hex	—	—	—	Hex	—
	34	" " Washer	1	"	—	—	—	—	Stick	—
	35	" " Handle	—							
	36	" " Flange	—							
	37	" " Rod	—							
	38	" " Stuffing Box	—							
	39	" " " " Gland	—							
	40	" " " " Nut	—							
	41	Box Cooler Valve	—							
	42	" " " Cap	—							
	43	" " " Stem	—							
	44	" " " Gland	—							
	45	" " " Nut	—							
	46	" " " Handle	—							
	47	" " " Coupling Nut	—							
	48	" " " Swivel	—							
	49									
	50	**GROUP 84—TENDER BRAKE**								
	51	Frame Body Brake Arrangement		858 B 20	—	—	—	—	—	—
	52	Body Brake Lever	1	842 M 26	—	842 M 26	—	—	—	—
	53	" " "	1	842 A 33	—	842 A 33	—	—	—	—
	54	" " " Support	2	858 B 20	—	480 S-207	—	—	—	—
	55	" " " "	1	"	—	84 A 84	—	—	—	—
	56	" " Connecting Rod R L	1 1	D-4861-Gr 8	—	D-4861-Gr 8	—	—	—	—
	57	" " " "	—		842 C 80				"	" "
	58	" " Equalizer	—							
	59	" " Fulcrum	—		842 C 85					
	60	" " Rod Cyl	1	D-4861 Gr 15	—	D-4861-Gr 15	—	—	—	—
	61	" " Clevis	—							

(Group 84 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 84—TENDER BRAKE (Cont.)								
	1	Body Brake Sheave	1	480 D 72	—	—	84-1	—	—	—
	2	" " " Support Complete	1	842 A 32	—	842 A 32	—	—	—	—
	3	" " Shaft	1	842 A 31	—	84 A 82	—	—	—	—
	4	" " " ~~Cap~~ Bearing	1	842 A 30	—	—	84-49	—	—	—
	5	" " " Hanger	1	842 B 30	—	—	84-50	—	—	—
	6	" " " Step	—							
	7	" " " Wheel	1	842 A 48	Stock	—	—	—	—	I C Patt M-1833
	8	" " " Handle	—							
	9	" " " Pawl	1	842 A 31	—	480S-109	—	—	—	—
	10	" " " " Plate	—							
	11	" " " Ratchet	1	842 A 29	—	—	84-46	—	—	—
	12	" " " Weight	1	842 C 7	—	—	84-43	—	—	—
	13	" " Cylinder	1	858 B 20	12"x12" Ord	—	—	—	—	—
	14	" " " Head	—							
	15	" " " "	—							
	16	" " " Support	1	858 B 20	Matl. Ord	84 B 25	—	—	—	—
	17	" " Pins	8	842 H 37	—	—	—	—	—	—
	18	" " "	—							
	19	" " "	—							
	20	" " "	—							
	21	Tender Brake Piston	—							
	22	" " " Follower	—							
	23	" " " Ring	—							
	24	" " " Rod	1	842 A 36	—	842 A 36	—	—	—	—
	25	Brake Reservoir Hanger	—							
	26	" " Strap	—							
	27	Hand Brake Arrangement		842 A 31	—	—	—	—	—	—
	28	" " Rod	1	842 A 34	With 7/8 Commercial Chain	842 A 34	—	—	—	—
	29	" " " Support	1	858 B 20	—	84 A 83	—	—	—	—
	30	Slack Adjuster "	1	"	—	84 A 81	—	—	—	—
	31									
	32									
	33									
	34									
	35	Truck Brake		893 B A 21	—	—	—	—	—	—
	36	" " Beam R L	2 2	" "	A.S.F. Ajax #12241 Ord	—	—	—	—	—
	37	" " " Beam Hanger Bracket	4	" "	—	84 A 85	—	—	—	—
	38	" "								
	39	" " " Support	8	" "	—	84 A 86	—	—	—	—
	40	" " " Safety Chain	—							
	41	" " " " Bar	4	893 B A 21	3"x3"x5/8" Angle	—	—	—	—	—
	42	" " " Leveling Eyebolt	4	" "	—	450S-207	—	—	—	—
	43	" " Head	—							
	44	" " Shoe	8	Am. B.S. & F. Dwg Co Ord		—	—	—	—	—
	45	" " " Key	8	—	—	—	—	—	—	—
	46	" "	—							
	47	" " Lever	2	842 J 39	—	842 J 39	—	—	—	—
	48	" " " Guide								
	49	" " Dead Lever	2	842 J 39	—	842 J 39	—	—	—	—
	50	" " " " Anchor	2	450 D 76	—	450 D 76	—	—	—	—
	51	" " " " " Lug R L	1 1	893 B A 21	—	450 S 70	—	—	—	—
	52	" " Lever Rod	2	842 B 9	—	842 B 9	—	—	—	—
	53	" " " "	—							
	54	" " Pins	10	842 H 37	—	—	—	—	—	—
	55	" " "	4	842 X 37	—	—	—	—	—	—
	56	" " "	1	842 S 37	—	—	—	—	—	—
	57	" " "	3	842 D 37	—	—	—	—	—	—
	58									
	59									
	60									
	61									

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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 85—TENDER FRAME			For future Cabs		use 858 A 28			
	1	Frame 85 M.O. 20	1	858 B 20	—	—	—	—	—	—
	2	" Center Sill	2	"	12" 40# Channels	—	—	—	—	—
	3	" Side Sill	2	"	12" 35# "	—	—	—	—	—
	4	" End Sill								
	5	" Corner Angle								
	6	" " Bracket								
	7	" " Knee R L	1/1	853 A 8	—	—	—	85-86 85-87	—	—
	8	" Brace 858-A-28	2	858 B 20	Matl. Ord	85 B 4	—	—	—	—
	9	" "								
	10	" "								
	11	" Filling 858-A-28	2	858 B 20	Matl. Ord	85 A 5	—	—	—	—
	12	" Tank Stops	3	852 B 13	—	—	—	85-53	—	—
	13	"								
	14	" Bolster 858-A-28	2	858 B 20	Matl. Ord	85 A 6	—	—	—	—
	15	" " ~~Angle~~ Space Block	4	852 B 12	—	—	—	85-52	—	—
	16	" " Plate								
	17	" " Truss Bar								
	18	" " " Brace								
	19	" " " Plate								
	20	" " Filling 858-A-28	2	858 B 20	—	85 B 5	—	—	—	—
	21	" " Tie Plate								
	22	" Center Plate	2	852 C ~~50~~ 10	—	—	—	85-50	—	—
	23	" Side Bearing	4	852 B 11	1/4" clearance. Back 7/16 " " Front	—	—	85-51	—	—
	24	" " " Shims 858-A-28	4	858 B-20	Thickness to Provide Clearance	—	—	—	—	—
	25	Push Pole								
	26	" " Collars								
	27	" " Pocket								
	28	" " Support 858-A-28	2	858 B 20	—	85 A 27	—	—	—	—
	29	" " Stop R L	1/1	"	—	85 A 28	—	—	—	—
	30	Wrecking Frog Brackets	—							
	31	Switch Rope Hooks								
	32	Check Chain								
	33	" " Pocket	4	852 A 34	—	—	85-95	—	—	—
	34	" " Hook								
	35	Tender Floor 858-A-28	1	858 B 20	2 1/2" x 12" Ord	—	—	—	—	—
	36	" " Edge	1	"	2 1/2" x 2" Wood	—	—	—	—	—
	37	Bumper—Front	1	C.S. Co 13482	Commonwealth Ord	—	—	—	—	—
	38	" —Back	1	C.S. Co. 11384 B	Commonwealth Ord	—	—	—	—	—
	39	Tender Floor Anchor	24	852 B 38	—	—	85-4	—	—	—
	40	" " "	4	852 A 38	—	—	85-22	—	—	—
	41									
	42									
	43									
	44									
	45									
	46									
	47	**GROUP 86—TENDER DRAWGEAR**		864 B ~~A~~ 6	Westinghouse N-11-A Ord	—	—	—	—	—
	48	Coupler	1	" "	Natl. Malla Steel Castings Co Type D Ord	—	—	—	—	—
	49	" ~~Pocket~~ Follower Block	1	" "	Mall. Iron. T.H. Symington. Ord	—	—	—	—	—
	50	" Followers	1	" "	Forged Steel. T.H. Symington Ord ~~H-577 B~~	—	—	—	—	—
	51	" Yoke	1	" "	Forged Steel. T.H. Symington H-577 A	—	—	—	—	—
	52	" " ~~Filler~~ Supports R L	1/1	" "	—	86 A 71	—	—	—	—
	53	" Follower Guide	—							
	54	" Carry Iron	1	862 A 14	—	—	—	86-43	—	—
	55	" Chain	1	864 B ~~A~~ 6	Natl. Mall & Steel Cs/gs Co Ord	—	—	—	—	—
	56	" " Clevis	—							
	57	Drawbar Pin	1	862 K 2	—	862 K 2	—	—	—	—
	58	" " Washer	1	862 A 42	—	—	86-89	—	—	—
	59	Safety Chain Pin	—							
	60	Draft Gear ~~Check Casting~~ Key	2	864 B ~~A~~ 6	T.H. Symington # ~~5195~~ 3194 Ord	—	—	—	—	—
	61	" " Key Cotter	2	" "	—	86 C 6	—	—	—	—

(Group 86 Continued)

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 86—TENDER DRAWGEAR (Cont.)								
8	1	Draft Gear ~~Carrier~~ Stop	1	862 A 41	—	—	—	86-88	—	—
8	2	~~Drawhead Brace~~ Draft Gear Carrier	1	864 B A 6	—	86 A 72	—	—	—	—
8	3	Uncoupling Shaft	1	862 A 43	Brackets Applied Before Bending	862 A 43	—	—	—	—
8	4	" " ~~Arm~~ Chain	1	864 A B 6	3/16" Chain. Uncoupling Shaft to Guard Chain			—	—	—
8	5	" " Bracket	3	862 A 44	—	—	86-90	—	—	—
	6	" " "	—							
	7	" " Handle	—							
	8	" " Cap	—							
	9									
8	10	Draw Casting—Front	1	863 A 14	—	—	—	86-34	—	—
	11	" " —Back	—							
	12	Safety Chain	—							
	13	" " Clevis								
	14	" " Staple								
	15	" " Washer								
	16									
8	17	Chafing Casting		373 A 28	Radial Buffer. Old		—	—	—	—
	18	" Iron								
	19	Spring Buffer								
	20	" " Case								
	21									
	22									
	23									
	24									
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	26									
	27									
	28									
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	30									
	31									
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	33									
	34	**GROUP 87—TENDER DECK AND TOOL BOX**								
8	35	Tender Deck	1	873 A 13	Wood	—	—	—	—	—
8	36	" " Shovel Plate	1	"	3/8" Plate. Old	—	—	—	—	—
✓	37	" " Support, Outside	—							
	38	" " " Inside	—							
8	39	" " Cover Plate	1	873 A 13	3/8" x 5 4/16" Dia.	—	—	—	—	—
	40									
	41	Tool Box	—							
	42	" "	—							
	43	" " Handle	—							
	44	" " "	—							
	45	" " Brace	—							
	46	" " "	—							
8	47	" closet Eyebolt	2	888 A 22	—	88 A 196 ~~X 205~~ 2 X 3	—	—	—	—
	48	" Closet Hinge	—							
	49	" " " Lug	—							
	50									
	51									
	52									
	53	Water Cooler	—							
	54	" " Base	—							
	55	" " Top	—							
	56	" " Lid	—							
	57	" " Casing	—							
	58	" " Cock	—							
	59									
	60									
	61									

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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 88—TENDER TANK								
1	1	Tank—Water	1	888 A 22	7000 Gallon	Bent Angles & Tees	—	—	—	—
8	2	" Material Bill 88 M 046								
	3	" Brace	—							
	4	" Knee	—							
	5	" Lifter Iron	—							
	6	" Drain Pipe	—							
	7	" " " Flange	—							
	8	" " " "	—							
	9	" Fuel Rack	—							
8	10	" ~~Fuel Hook~~ Lug	2	888 A 22	—	88 A 24	—	—	—	—
8	11	" Lug	4	"	—	4705 08	—	—	—	—
8	12	" "	2	"	—	88 B 18	—	—	—	—
8	13	" Funnel	1	882 A 54	1/4" Plate Ord	—	—	—	—	—
8	14	" " Lid	1	"	1/4" " "	—	—	—	—	—
8	15	" " Hinge	2	"	—	88 A 76	—	—	—	—
8	16	" " " Lug	1	"	—	88 A 75	—	—	—	—
8	17	" " Handle	1	882 A 1	—	—	—	88-8	—	—
8	18	" " ~~Screen~~ Hinge Pin	1	882 A 54	—	88 A 77	—	—	—	—
8	19	" Coal Gate	1	883 B 4	1/4" Plate Ord	—	—	—	—	—
8	20	Coal Gate Angle	2	"	3"x3"x3/8	—	—	—	—	—
	21	" " Catch	—							
8	22	" " Latch	8	470 D 283	Locate on Gate to Suit Tank	—	88-44	—	—	—
8	23	" " Hinge	8	883 B 4	12" Ex Heavy T. Ord	—	—	—	—	—
	24	" " " Lug	—							
	25	" " Chain	—							
	26	" " Eyebolt	—							
8	27	" " Slide Clamp	2	883 B 4	—	470S-308	—	—	—	—
	28	" " Catch Bracket	—							
	29	" " Handle	—							
	30									
	31	Tank Cut Out for Stoker	—							
	32									
	33									
	34	Tank—Oil	—							
	35	" Material Bill	—							
	36	" Brace	—							
	37	" Lifter Iron	—							
	38	" Lug	—							
	39	" "	—							
	40	" Funnel	—							
	41	" " Lid	—							
	42	" " Hinge	—							
	43	" " " Lug	—							
	44	" " Screw	—							
	45	" " Handle	—							
	46	" " Gasket	—							
	47	" " Screen	—							
	48									
	49									
	50	Coal Pusher	—							
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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 89—TENDER TRUCK								
P	1	Truck	2	893 ~~A~~ B 21	5½"x10" Journals	—	—	—	—	—
P	2	" Arch Bar	4	892 A 66	Matl. Ord	892 A 66	—	—	—	—
P	3	" Truss Bar	4	"	" "	892 A 66	—	—	—	—
P	4	" Tie Bar	4	"	" "	892 A 66	—	—	—	—
P	5	" Columns R	4	893 A 23	—	—	—	89-24	—	—
P	6	" " L	4	"	—	—	—	89-25	—	—
P	7	" Bolster	2	893 ~~A~~ B 21	Pittsburg Stl. Fdry Co #1837. Ord	—	—	—	—	—
P	8	" ~~Guide~~ Column Washers	8	893 A 23	—	—	—	—	—	—
P	9	" ~~Bar~~ Box Shims	16	893 ~~A~~ B 21	½"x5"x13" Plate	—	—	—	—	—
	10	" " Cap	—							
	11	" " Truss Rod	—							
	12	" " " " Washer	—							
	13	" Center Plate	—							
P	14	" King Bolt	2	892 F-79 ~~D-45105-6~~ Line	—	892 F 79 ~~D-45105-6~~ Line	—	—	—	—
P	15	" " " Keys	2	"	—	~~D-45105~~	—	—	—	—
P	16	" Spring Plank	2	893 ~~A~~ B 21	½" Plate. Ord	—	—	—	—	—
	17	" " Seat—Top	—							
	18	" " " —Bottom	—							
	19	" " Hanger	—							
	20	" " "	—							
	21	" " " Gib	—							
P	22	" Side Bearing	4	893 ~~A~~ B 21	A. Stucki Ord	—	—	—	—	—
	23	" " " Block	—							
	24	" Frame	—							
	25	" " Brace	—							
	26	" " Crosstie	—							
	27	" Pedestal	—							
	28	" "	—							
	29	" " Cap	—							
	30	" " " Tie	—							
	31	" Equalizer	—							
	32	" "	—							
	33	" Swing Frame	—							
	34	" " Link	—							
	35	" " Pins	—							
P	36	" Check Chain	4	892 K37	With Single Nut & Bartley Nut Locks	892 K37	—	—	—	—
	37	" " " Bolt	—							
	38	" " " Clevis	—							
	39	" " " Pocket	—							
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Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 90—TENDER WATER SCOOP								
	1	Water Scoop	7							
	2	Scoop Cylinder								
	3	" " Head								
	4	" " "								
	5	" " Gland								
	6	" " Support	7							
	7	" " "								
	8	" Piston								
	9	" " Follower								
	10	" " Rings	7							
	11	" " Rod								
	12	" " " Jaws								
	13	" " " Extension Links								
	14	" Inside Pipe	7							
	15	" Outside Pipe								
	16	" Air Pipe Casing								
	17	" Neck								
	18	" Splash Hood	7							
	19	" Dipper								
	20	" " Link								
	21	" " Lifter								
	22	" " Nose	7							
	23	" " Shield								
	24	" " " Brackets								
	25	" Shaft								
	26	" " Fulcrum	7							
	27	" Bell Crank								
	28	" Arm								
	29	" Spring Cap								
	30	" " Rod	7							
	31	" " Seat								
	32	" " " Support								
	33	" Jaws								
	34	" Rods	7							
	35	" Lever								
	36	" Link								
	37	" Bracket								
	38	" Brace	7							
	39	" Pipe Hanger								
	40	" Joint Piece								
	41	" " " Trunion Cap								
	42	" " " " "	7							
	43	" " " Lifting Links								
	44	" " " " "								
	45	" Delivery Pipe Hanger								
	46	" " " " Clamp	—							
	47	" " " " Clips	—							
	48	"								
	49	"								
	50	" Operating Valve	7							
	51	" " " Cap								
	52	" " " Plug								
	53	" " " Nut								
	54	" " " Handle	7							
	55	" " " Quadrant								
	56	" " " Spring								
	57									
	58									
	59									
	60									
	61									

Check	Item	TITLE	No. Pcs.	DRAWING Card No.	DRAWING Construct'n Notes	FORGINGS Sketch No.	CASTINGS—PATTERN NUMBERS Cast Iron	Cast Steel	Brass	Mal. Iron
		GROUP 95—WHEELS AND TIRES								
P	1	Truck Wheel 33"	8	Rolled Steel Carnegie to S-1131 Old			—	—	—	—
P	2	Wheel Pressed on Axle (Tons)		65 Tons Min 85 Tons Max		—	—	—	—	
	3	Wheel Center	—							
	4	" Tire	—							
	5	Tire Retaining Ring	—							
	6	Wheel Numbers	—							
	7									
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	26	**GROUP 99—MISCELLANEOUS**								
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Check	Item	TITLE	No. Pcs.	DRAWING		FORGINGS	CASTINGS—PATTERN NUMBERS			
				Card No.	Construct'n Notes	Sketch No.	Cast Iron	Cast Steel	Brass	Mal. Iron

#8852

TENDER FRAME MATERIAL FOR 7000 GALLON TANK

NO. PCS.	DESCRIPTION	THICK	WIDE	LONG	WEIGHT	MATERIAL
1	FRAME CROSSTIE PLATE	5/16"	27 1/2"	104"	275#	TANK STEEL
1	" " "	1/4"	31 1/2"	104 1/2"	255	" "
1	" " "	3/4"	5"	104"	115	" "
1	" BOLSTER "	3/4"	19 1/2"	104"	490	" "
1	" " "	3/4"	17 1/2"	104"	400	" "
2	DIAGONAL BRACES	1"	5"	132"	390	" "
2	FRAME BOLSTER PLATES	1 1/2"	16	120	1630	" "
2	" FILLINGS	3/4"	16	24	170	" "
2	" "	1"	16	30	280	" "
2	" STIFFENINGS	1"	10 1/2"	66	420	" "
1	" CROSSTIE PLATE	1/4"	20 1/2"	23 1/2"	38	" "
1	BRAKE CYL. SUPPORT PLATE	1/2"	16	56	135	" "
1	SHOVEL PLATE	3/8	72	84	690	" "

2 CHANNELS CAR. SEC. C2 - 12"-40# PER FT. 23'-11" LONG
2 " " " " 12"-35# " " 21'-10" "

DRAWN G.U. TRACED D.A. CHECKED C.R.A. APPROVED F.W. Scougall Jr.

MATERIAL ORDER 85-M.O.-20

5-12-26 C.O. 1091

Material Specifications

1091 U.R.T.

PAT. NO.
USS 1427

PAT'D.

FOR CARS.
FOR TENDERS
FOR CARS.
FOR TENDERS.

3/4" BOLTS OR RIVETS.

SPRING STEEL TEMPERED IN OIL.

M. I.

WIDTH OF PLATE 4", HOLES PUNCHED CENTRAL IN ALL CASES.

REV. E. 3-12-23. THICKNESS SIDE WALLS INCREASED TO 3/8, END WALLS, BEADING, RIBS & RIVET LUGS TO 5/16, TOP PLATE MADE 4" WIDE AS STANDARD.

STUCKI SIDE BEARING.

PITTSBURGH, PA.

4-5-1918

577 E.

FOR 70 & 100 TON CARS.

REV D, 5-27-20. HOLE SPACING, TEMPER TOP PLATES CHANGED.

Material Specifications

AMERICAN STEEL FOUNDRIES

AJAX BRAKE BEAM

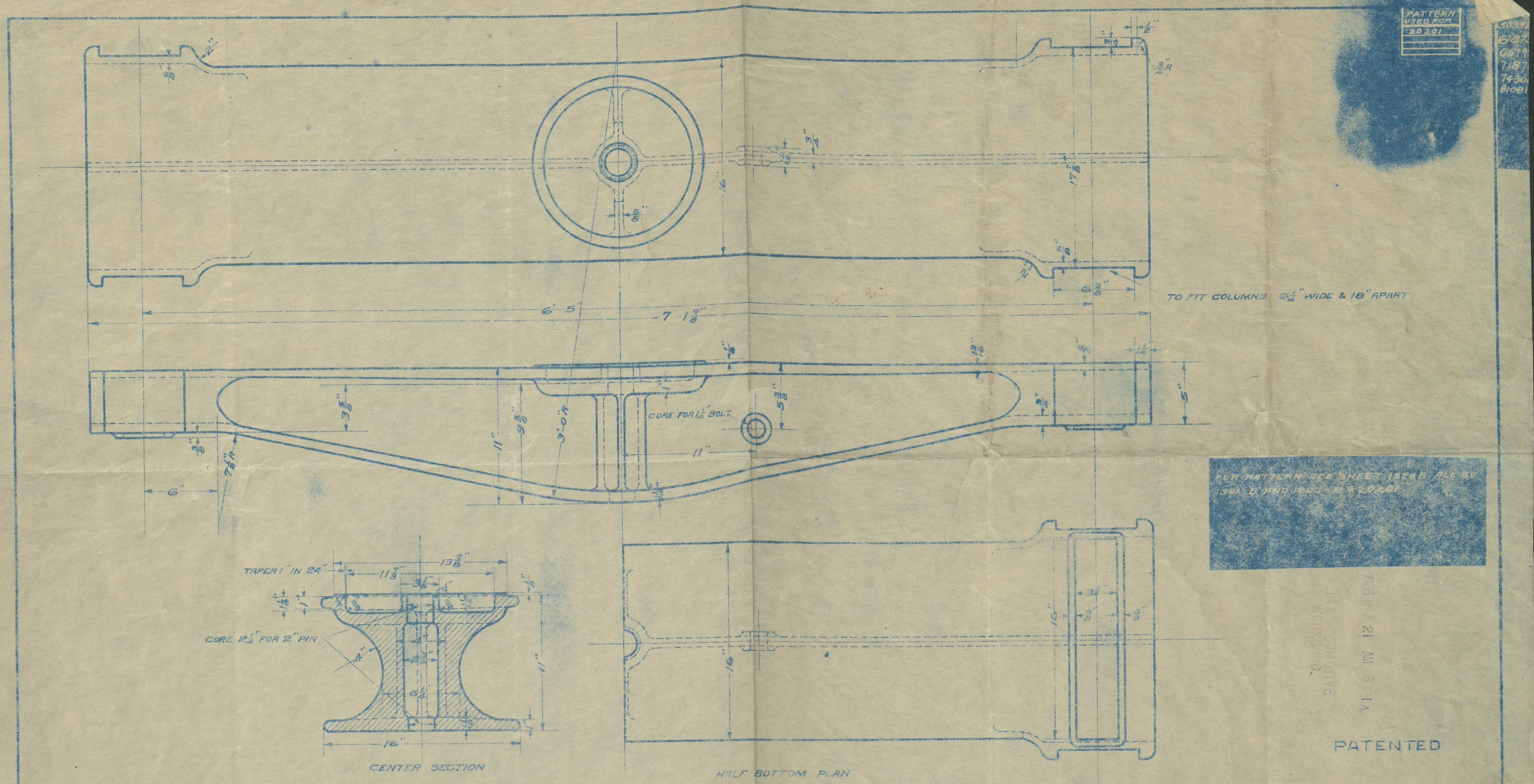
SIMPLEX WORKS

FOR

1241 ABOEF

DEC. 15, 1915.

| | | |


PATTERN USED FOR 20201
TO FIT COLUMNS 6¼" WIDE & 18" APART
6' 5"
7' 1⅞"
CORE FOR 1¼" BOLT
3'-0" R
TAPER 1" IN 24"
CORE 2¼" FOR 2" PIN
CENTER SECTION
HALF BOTTOM PLAN
FOR PATTERN SEE SHEET 1326 B ALL SO 1301 B AND 1287 B & 20201
PATENTED
APRIL 10-1913
TRUCK BOLSTER
50 TON CAPACITY TENDERS
BALDWIN LOCOMOTIVE WORKS
FOR UNION R.R.
75,000 LBS ON CENTER PLATE
PITTSBURGH STEEL FOUNDRY
PITTSBURGH PA
SCALE 2" = 1 FOOT
SHEET 1837

32-16

al. Iron

Material Specifications